

BRUHATH BENGALURU MAHANAGARA PALIKE
EXECUTIVE ENGINEER, YELAHANKA DIVISION

Name of Work: Maintenance and Repairs of Existing Borewells in 110 Village areas of Attur Ward
No 03

DETAILED ESTIMATE

SL No	Particulars	Unit	Nos	L in m	B in m	D in m	Quantity	Rate in Rs.	Amount in Rs.
MOTOR REWINDING									
	Rewinding of submersible pumpset with copper winding wires of appropriate guage, as per specifications and / or directions of the departmental officials, including all materials, labour, equipment and testing, for all types of submersible pumpsets etc.(with guarantee period not less than 6 months) for For all types of submersible pumpsets above 7.0 HP and upto 7.5H.P (BWSSB 'SR 2023-24 P- 147)								
1	For all types of submersible pumpsets above 10 HP and upto 11 H.P (I No:13.1.12)	Each					40.00	5157.00	206280.00
2	For all types of submersible pumpsets above 12 HP and upto 13 H.P (I No:13.1.15)	Each					40.00	5983.00	239320.00
3	For all types of submersible pumpsets 15HP to 20 HP (I No:13.1.18)	Each					10.00	8930.00	89300.00
	B) Repair of Pump parts								
	Replace the components of submersible pump sets, requiring replacements decided by the departmental officials, with respective make of damaged ones, including all materials, labour, equipments and testing etc.(with gurantee of period not less than 1 year) for: (BWSSB SR 2023-24 P- 147 & 148 I- 13.2.1 to 13.2.17)								
4	The bowls of same type and make	Each					50.00	1500.00	75000.00
5	The Intermediate piece (IP) with IP leaded bronze brush.	Each					50.00	1050.00	52500.00
6	The Oil Seal.	Each					50.00	350.00	17500.00
7	The Oil Seal and steel bush	Each					50.00	250.00	12500.00
8	The Guide Vane	Each					50.00	700.00	35000.00
9	The Impeller (Shell moulded with aluminium and bronze.)	Each					50.00	1500.00	75000.00
10	The discharge outlet (DO) bearing DO steel brush DO bearing	Each					50.00	2050.00	102500.00
11	The steel bearing bush (DO steel bush)	Each					50.00	400.00	20000.00
12	The allen screw	Each					50.00	1200.00	60000.00
13	The pump shaft made out of stainless steel counterless ground with key way (upto 8 stages). Extra for Each stage @ Rs.40/-.	Each					50.00	1500.00	75000.00
14	Pump key (stainless steel)	Each					50.00	650.00	32500.00
15	Pump coupling (stainless steel)	Each					50.00	1500.00	75000.00
16	Non-return valve (NRV) assembly complete with rubber 'O' ring	Each					50.00	650.00	32500.00
17	Cable Guad	Each					50.00	350.00	17500.00
18	Strainer	Each					50.00	450.00	22500.00
19	Brass filter	Each					50.00	1050.00	52500.00
20	The Labour Charges for overhauling of the pump set.	Each					50.00	900.00	45000.00

SL No	Particulars	Unit	Nos	L in m	B in m	D in m	Quantity	Rate in Rs.	Amount in Rs.
	C.Replacement of Motor parts Replace the components of motor parts of submersible pump sets, items requiring replacements decided by the departmental officials, with respective make of damaged ones, including all materials, labour, equipments and testing etc and with guarantee/warranty for one year for: (BWSSB, SR 2023-24, Page No. 148, Item No.13.3.7 to 13.3.21)								
21	Upper Flange	Each					50.00	650.00	32500.00
22	Lower Flange	Each					50.00	650.00	32500.00
23	Lower Housing	Each					50.00	1200.00	60000.00
24	Lock Ring	Each					50.00	350.00	17500.00
25	Carbon Housing	Each					50.00	2000.00	100000.00
26	The Carbon Housing (Thrust bearing block assembly complete with segment bearing pad.	Each					50.00	2200.00	110000.00
27	The Carbon Housing (Top carbond / ferodo padding)	Each					50.00	350.00	17500.00
28	Stud and Nuts	Each					50.00	200.00	10000.00
29	The Gun Metal bearing, centrifugally cast Aluminium Bronze bearing bush	Each					50.00	850.00	42500.00
30	Circlips	Each					50.00	200.00	10000.00
31	Motor base with pin	Each					50.00	500.00	25000.00
32	Transportation of pumping machineries	Each					50.00	1200.00	60000.00
33	Labour charges Over hauling only) Motar	Each					50.00	3000.00	150000.00
34	Labour charges for Lifting of non functioning submersible pump set along with cable and GI pipes (Each length = 6m)). for 50 mm (BW SSB SR 2023-24 P- 142 Item No.12.24)								
		Job	90.00	30.00			2700.00		
							2700.00	229.00	618300.00
35	Labour charges for Erection of new / repaired submersible pump set along with GI pipes (32mm / 50mm), cable (New submersible pump set if required will be supplied by the department free of cost and released pump set should be handed over to department) including transportation (Each length = 6 m) (BWSSB SR 2023-24 P- 142 Item No.-12.28)								
		Job	90	30.00			2700.00		
							2700.00	187.00	504900.00
36	Supplying and Drawing 3 Core Flat PVC Shelled Submerisable Pump Cable Manufactured With Electrolytic grade copper with flexible copper conductor confirming to table 3 class 5 of IS 8130-1984 and Virgin PVC insulation and Sheeated Suitable for working Voltage Upto 1100 Volts as per IS-694:1990. 3C x 6.05qm (Page No.7 Item No:2.6.3 ELE SR SR 2023-24)								
		RMT	350						
							350.00	245.00	85750.00
37	Supplying & fixing miniature circuit breakers on existing MCB distribution boards using necessary fixing materials and 'C' Type curve, indicator ON/OFF, energy cross-3 with Short circuit breaking capacity of 10K and complete wiring as required confirming to IEC 60898. (PWD Electrical SR 2023-24 P-18, I- 5.18.9)								
		Each	15				15.00	3088.00	46320.00

Particulars	Unit	Nos	L in m	B in m	D in m	Quantity	Rate in Rs.	Amount in Rs.
Supplying & fixing of Porcelain fuse channel with cutout on existing wooden/panel using necessary nuts, bolts and washers. (PWD Electrical SR 2023-24 P-14, I-5.7.3)								
	Each							
		75				75.00	401.00	30075.00
Providing Submersible Pump Set of 150mm dia suitable for bore well and confirming to IS 8034-2000; 3Phase, SS Bowl & Impeller with Low volt Motor as per specifications, to work site as per necessary ammendments and instructions of engineer incharge of work. (BWSSB 2023-24, P-153, I-13.17.7, 13.16.7 & 13.18.6)								
39 For 12.50 HP - 90 LPM @ 264 m = 24 STG Outlet Dia - 2.00"	No							
		2				2.00	64128.00	128256.00
40 15.00 HP - 120 LPM @ 266 m = 23 STG Outlet Dia - 2.00"	No							
		2				2.00	69344.00	138688.00
41 Supply and delivery at site of brand new best make non-return valve as per IS 778/1984 with ISI Mark and as per its latest ammendments Size 50mm dia (BWSSB SR 2023-24, P.154, I-13.25.1)								
	Each							
		17				17.00	1250.00	21250.00
42 Supply and delivery at site wrought middle steel (galvanized) GI union confirming to IS 1239-II, 1991 with latest ammendments if any. For 50 mm dia GI Union (BWSSB SR 2023-24 P-131, I-11.12.6)								
	Each							
		25				25.00	267.00	6675.00
43 Supply and delivery at site wrought middle steel (galvanized) GI elbow confirming to IS 1239-II, 1991 with latest ammendments if any. For 50 mm dia GI Union (BWSSB SR 2023-24 P-129, I-11.7.6)								
	Each							
		25				25.00	267.00	6675.00
44 Supply and delivery at site wrought middle steel (galvanized) GI hexagonal nipple confirming to IS 1239-II, 1991 with latest ammendments if any. For 50 mm dia GI hexagonal nipple (BWSSB SR 2023-24 P-132, I-11.14.6)								
	Each							
		25				25.00	213.00	5325.00
45 Providing wrought mild steel (galvanized) GI collar confirming to IS 1239-II, 1991 with latest ammendments if any. For 50 mm dia GI collar (BWSSB SR 2023-24 P-129, I-11.14.6)								
	Nos							
		150				150.00	267.00	40050.00
46 Logging / scanning of borewell at any depth continuously with the help of Logger unit including the cost of transportation charges, crew charges, stationery charges and cost of consumables etc. (BWSSB SR 2023-24 P-140, I-12.7)								
	Each							
		15				15.00	3674.00	55110.00
47 Lifting of struck up submersible pump set. Above 300 ft (BWSSB SR 2023-24 P-142, I-12.27)								
	Job							
		10				10.00	13087.00	130870.00
48 Labour charges for Lifting of non functioning submersible pump set along with cable and GI pipes (Each length = 6m) . for 50 mm (BWSSB SR 2023-24 P-142, I-12.24)								
	Job							
		10	30.00			300.00	229.00	68700.00

SL No	Particulars	Unit	Nos	L in m	B in m	D in m	Quantity	Rate in Rs.	Amount in Rs.
49	Cutting and threading G.I. pipes for pump fitting, public fountains with appurtenances., where the length of pipe laid is less than 6 metres Pipes of dia 32mm to 80mm (BWSSB SR 2023-24 P-15, I-2.2.2)	Each	200				200.00	322.00	64400.00
50	Earth work excavation for pipelines/cables by Manual means upto 600 mm trench width, as per drawing and technical specifications, including setting out, shoring, strutting, barricading, caution lights, removal of stumps and other deleterious matter, including dressing of excavated surfaces, disposing off or leveling the excavated earth or sorting & stacking the selected earth for reuse in a radius of 50 m. Filling available excavated earth (excluding rock) in trenches, plinth, sides of foundations etc. in layers not exceeding 20cm in depth, consolidating each deposited layer by ramming and watering and lift upto 1.5 m including cost of labour, tools, usage & other appurtenances required to complete the work. In all kinds of soils. Depth upto 1.50m (KPWD SR 2023-24, V-1, Page No.6, Item No.1.6.1)								
	Rate Analysis	Cum							
	Basic Rate Rs.	484.00							
	Area weightage 10%	48.40							
	Total Amount Rs.	532.40							
			1	400.00	0.45	0.75	135.00		
						Total Qty	135.00	532.40	71874.00
51	Providing PVC ringite pipes conforming to IS 985:2000 with latest amendments and conveying to worksite, rolling and lowering into trenches, laying true to line and level and perfect linking at joints, testing and commissioning, including loading unloading at both destinations and cuts of pipes wherever necessary including jointing of PVC pipes and specials (excluding cost of specials) with jointing of approved type, with all labour with all lead & lift including encasing the pipe around to a depth of not less than 15 cms. with soft gravel or selected earth available from the excavation etc. complete and giving necessary hydraulic test to the required pressure as per ISS (Contractor will make his own arrangements for procuring water for testing) etc. complete For: PVC pipes 75mm dia., 6 kg/sqcm & class 5 (BWSSB SR 2023-24, Page No.113 Item No.10.1.5)	Mtrs							
			1	400.00			400.00		
						Total Qty	400.00	220.00	88000.00
	Rate Analysis								
	Basic Rate Rs.	220.00							
52	Refilling available earth around trenches/pipelines, cables in layers not exceeding 20 cms in depth, compacting each deposited layer by ramming after watering with a lead upto 50 m, and lift upto 1.5 m. Including cost of all labour complete as per specifications (KPWD SR 2023-24, V-1, Page No.7, Item No.1.10)								
	Rate Analysis	Cum							
	Basic Rate Rs.	160.00							
	Area weightage 10%	16.00							
	Total Amount Rs.	176.00	1	400.00	0.45	0.60	108.00		
							108.00	176.00	19008.00

Particulars	Unit	Nos	L in m	B in m	D in m	Quantity	Rate in Rs.	Amount in Rs.
Providing, laying, spreading and compacting graded stone aggregate to wet mix macadam specification including premixing the Material with water at OMC in mechanical mix plant carriage of mixed Material by tipper to site, laying in uniform layers with paver/grader in sub-base / base course on well prepared surface and compacting with vibratory roller to achieve the desired density (V-III, P.No-26,I No-4.17 of PWD SR 2023-24)								
Ward No-01	Cum	1	400.00	0.45	0.20	36.00		
Rate Analysis						36.00	2814.90	101337.00
Basic Rate	2559.00							
10% Area Weightage	255.90							
Total	2814.90							
Sub Total Cost							4236463.00	
GST 18 %							762563.34	
Total Cost							4999026.34	
Misc and rounding off							973.66	
Grand Total Amount							5000000.00	

Rupees Fifty Lakhs Only

Certificate:

- Certificate:**
1. The work spot has been inspected and found to be necessary
 2. The provisions made in the estimate are necessary and minimum
 3. The estimate is based on CSR of 2023-24 (KPWD, ELE, BWSSB)

Assistant Engineer
Ward No.03
BBMP, Bangalore


 Assistant Executive Engineer
 Allur Sub Division
 Bangalore
 22.08.2019

Executive Engineer
Yelahanka Division
BBMP, Bangalore

Administrative Sanction for Rs. 50.00 Lakh
Rupees Fifty Lakh Only

is accorded under head P-1802

Registered as CE No. 45 Subject
to conditions contained in enclosed memo
No. BBMP/EE/YAY-D/AS/45/24-25 Dr. 12/11/24

Executive

Technical Sanction

Accorded For SD. DD. Lohy
Head of A/C P-1802
SR NO 132 dt 12/11/2024

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CE (YRK)